THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

Vol. XC.] THURSDAY, JUNE 18, 1874. [No. 25.

Original Communications.

SURGICAL CASES.

By JOHN HOMANS, M.D.

Surgeon to Carney Hospital.

Popliteal Aneurism; Ligature of the Femoral Artery; Cure.—John A., aged 30 years, entered the Carney Hospital January 26, 1874. The patient has always been well until about eight weeks ago, when, on waking one morning, he found that he could not stand on his right leg, and that he was suffering severe pain from his knee to his ankle. He has been obliged to give up working on account of the pain. On examination, a pulsating tumor is found to occupy the whole of the right popliteal space, anatomically considered, i. e., from the opening in the adductor tendon to the heads of the gastrocnemius. The pulsation can be seen at a distance of ten feet. A thrill is felt when the tumor is touched. Compression of the femoral stops all pulsation. The right lower extremity is larger than the left, and the toes are of a blue color. No pulsation can be felt in the dorsalis pedis, nor in the posterior tibial. The right knee measures 14½ inches; the left, 13⅞. The right calf measures 13⅜ inches; the left, 12½. Patient complains of a numb feeling in the toes, especially in the first and second. On the 2d of February, the patient was etherized, and the femoral artery tied at the apex of Scarpa's triangle. Pulsation ceased at once in the tumor, and never returned. The ligature came away on the 21st day, and, except for the confinement to the bed, he suffered but little inconvenience from the operation. He was discharged, well, on the 28th of February, at which date there was no pulsation in the dorsalis pedis, nor in the posterior tibial. The tumor in the popliteal space was very considerably reduced in size. The right knee measures 14 inches in circumference. The man can remember no injury that would account for any rupture or injury of the artery, except that, about five years ago, when storing heavy boxes of sugar, one slipped across the anterior and inner part of his thigh, tearing the skin considerably. He has been at work since March 8th, and has no pain nor inconvenience, except some swelling of both legs, mostly of right; this goes down at night.

May 4th.—I saw A—— to-day, doing the work of a porter in one of the largest dry goods stores in this city. He states that he has no trouble with his leg.

Cancer of Tongue; Cure. Lingual Artery tied and Growth removed.—Thos. O. M. entered the Carney Hospital on February 24, 1874. He is a tailor, 38 years old. On the left side of his tongue, about three-

fourths of an inch from the apex, is a foul, sloughy-looking ulcer, with ragged, everted edges, and an indurated base. The tongue is thickly coated, and articulation and deglutition are difficult. The growth is two and one-half inches in length, by one inch in breadth. Patient states that, about fourteen years ago, a small kernel appeared on the left side of the tongue, a short distance from the apex; this has gradually spread downwards and backwards, producing abundant salivation, and at times causing severe pain. The submaxillary glands are not affected. On the 27th, he was etherized; during the process of etherization, the pulse and the respiration suddenly ceased, without any apparent cause, and for a few seconds the patient's condition was quite alarming; soon, however, pulsation was felt again at the wrist, at first slowly, and then gradually rising from 30 beats a minute to 40, 50, and, finally, to 80; respiratory action recommenced, and there was no further trouble. An incision, about three inches long, was made, from a point over the lesser cornu of the hyoid bone, toward the left mastoid process; the left lingual artery was found beneath the triangle formed by the hypoglossal nerve and the tendon of the digastricus, and tied. The growth was then cut out with scissors, and a margin of a quarter of an inch of sound tissue was removed with it. There was almost no bleeding. Dr. Fitz was kind enough to examine the tumor, microscopically, and reported that it was an epithelioma. The wounds in the neck and mouth soon healed; the ligature came away from the lingual artery on or about the tenth day, and on the first of April the patient left the hospital, perfectly well. Ligature of the lingual artery in connection with operations on the tongue is not a new proceeding; it has been abandoned, I suppose, on account of the troublesome dissection required to secure the artery. The wound is, at the end of the operation, a pretty deep one, and the movements of the larynx and hyoid bone embarrass the operator. As the lingual arteries, according to Hyrtl, do not anastomose, it is easy to see how completely the supply of blood may be cut off from the side of the tongue corresponding to the ligatured artery. This is the second case that I have treated in this way, and I have been well pleased with the results. See this JOURNAL for Jan. 21, 1869.

CASE OF SARCOMA OF THE UTERUS.

Read before the Boston Society for Medical Observation, April 6th, 1874.

By D. H. HAYDEN, M.D.

MRS. O., light mulatto, æt. 59, admitted into Aged Colored Women's Home in January, 1872. Had always been a healthy woman. Father was said to have died of cancer of stomach. Mother said to have died of swelling of the bowels. Had had one child. Menstruation stopped at the age of 45 years. Had during that winter more or less trouble connected with the cessation of menstruation; enjoying then good health until the following winter, when she was again unable to work, owing to the severe pains which she suffered in chest and bowels. After this, was in excellent health, and worked hard for twelve years.

In June, 1867, she asserts that she felt something give way in right groin, while lifting; was taken unwell a few days afterwards, and

catamenia came on subsequently for five months regularly, lasting four or five days, being moderate in quantity, and being preceded, as they used to be, by pains in limbs and back. Between these periods, she had "the whites," which discharge continued ever afterwards, at times alternating with flowing, but never to any large amount until *the fall of* 1871, when she began to flow considerably, every day seeing more or less; and about this time she began to suffer very much with severe pains; these pains, mostly referred to the lower part of the abdomen, she had had, occasionally, for a long time previously, but never of great severity. She was obliged to give up work entirely and keep to the bed in January, 1872, this being followed by an amelioration of all the symptoms, though there was never a day that she was entirely free from pain; discharge, at times, offensive.

March 22, 1872.—With the assistance of Dr. Hall Curtis, the patient was etherized, and a vaginal examination made.

The os was dilated so as easily to admit the tip of the finger, which came, at a short distance within, upon a soft, friable mass, as if projecting from the fundus uteri, and small portions came away upon the finger. These were examined microscopically by Dr. J. C. Warren, who found "abundant small, round and spindle-shaped cells," and gave it as his opinion that the tumor was *sarcomatous*.

Patient had lost considerably in flesh and strength since the previous autumn. There was nearly complete anorexia. Bowels were rather constipated, but dejections were not accompanied by pain. Micturition free and not painful.

The treatment consisted, principally, throughout the whole course of the disease, of subcutaneous injections of morphine to relieve the pain as occasion required. Various tonics employed seemed to produce no result, and were given up, the patient doing as well when not taking them, but begging anxiously for the subcutaneous injections, which rendered invaluable service throughout the remainder of her life, keeping her a large part of the twenty-four hours in a comfortable condition, though at times the pain would be of a most severe character.

In the following summer (1872), patient began to suffer much with various distressing, gastric symptoms, such as heart-burn, "a distressed feeling and pressure (as she described it) in the pit of her stomach," profuse salivation (sometimes filling six or seven spit-cups in the course of the day), nausea, though never vomiting, and occasional attacks of gastralgia. The appetite continued poor, but there was no particular distress brought on after eating. There was, also, considerable tenderness over the epigastrium on pressure, but no tumor to be felt.

Various remedies, such as bismuth, sulphate of zinc, nitrate of silver and alkalies produced but little if any amelioration of these symptoms, they continuing, with varying degrees of severity, up to death.

Aug. 29, 1872, it is recorded:—

Of late, the morphia has been increased to one-third of a grain once daily, with which patient gets on quite comfortably, though if omitted there is great suffering from pain. The gastric symptoms have, of late, been less distressing, and patient has, for several weeks, given up taking medicine for them. Discharge (vaginal) abundant, and at times much colored with blood; generally offensive.

April, 1873:—Patient lingers along without any marked change in the symptoms. Some days, feels bright and hopeful; these followed, invariably, by a change for the worse, she suffering much with pains, and becoming despondent and depressed. Appetite and digestion pretty good. Morphia has been increased to half a grain per day.

May 9th.—Morphia is increased to half a grain morning, and one-fourth grain at evening.

Aug. 23, 1873, it is reported:—

Since last reported, has been steadily failing. Morphia has been gradually increased, so that, at present, it is found necessary to administer two-thirds of a grain every three hours during the day. This keeps down the pain pretty effectively, though patient says that there is more or less continuously in hypogastric region. There is a constant sinking sensation in epigastrium, which is very tender on pressure, but no tumor is to be felt. Anorexia complete, and patient takes but little nourishment. Discharge abundant, very offensive, and often highly colored. In addition to the subcutaneous injections during the day, patient takes at night one to two drachms of McMunn's elixir. This latter, according to patient, has a more quieting and sleep-producing effect, though the injection acts more effectively in stopping the pain.

Died September 1st, at 2½ P.M.

The autopsy was made by Dr. John Homans. There were no thoracic nor cerebral symptoms during life, and the abdomen was alone examined.

Emaciation everywhere extreme.

The stomach was contracted, the mucous membrane pale and rather thin; otherwise free from disease. With the exception of the uterus, the other abdominal organs were healthy.

The uterus was submitted to Dr. James R. Chadwick for examination, and to him I am indebted for the following report:—

"Length of uterus, 3½ inches.

"Length of cavity, 3 inches.

"Breadth of uterus on level with insertion of round ligaments, 2¼ in.

"Thickness " " " " " " 1½ in.

"Cavity of uterus almost filled with an irregularly lobulated, shreddy growth, arising from the whole inner surface of the organ, except at the fundus between the orifices of the tubes and the lower half of the cervix. The orifice of the right Fallopian tube seems to be occluded, but that of the other to be free. The vaginal portion of the uterus projects but very little beyond the surface of the vaginal *cul-de-sac*, has one deep, cicatrized notch, and is not at all implicated by the foreign growth. The os externum readily admits a finger. The walls of the organ are somewhat thickened. The limits of the tumor are not clearly defined from the true uterine tissue. At one point on the anterior surface of the body, there was a soft, elastic nodule, as large as a pea, which, on being incised, was found to contain pus.

"The ovaries and free ends of the tubes are bound to the uterus by firm, perimetric adhesions.

"Microscopic examination of the tumor proves it to consist entirely of round and irregularly-shaped cells, and to be a medullary sarcoma."

This specimen is one of rare occurrence, and it is only within the last few years that its presence has been demonstrated in the uterus.

In the *Archiv für Gynækologie* are to be found the following articles upon this disease, for reference to which I am again indebted to Dr. Chadwick :—

Erster Band, Zweites Heft, "On Sarcoma of the Uterus," by von Gusserow.

Zweiter Band, Erstes Heft, "On Sarcoma of the Uterus," by Dr. Hegar.

Dritter Band, Zweites Heft, "Two Cases of Sarcoma of the Uterus," by Dr. Winckel.

Vierter Band, Drittes Heft, "Contribution to the Knowledge of Sarcoma of the Uterus," by Dr. Chroback.

We find given as clinical differences between sarcoma and carcinoma uteri :—

Sarcoma grows invariably from the fundus or body, and never invades the orificium uteri, although often protruding from it.

In *sarcoma* there is very great pain from the outset. This does not generally occur in carcinoma until the neighboring organs are involved.

In *sarcoma*, hæmorrhage appears early, and there is a less amount of fœtid, serous discharge, so characteristic of carcinoma. In carcinoma, the hæmorrhage seems to supervene after sloughing or ulceration has commenced.

The great friability of the *sarcomatous* mass would distinguish it from a fibroid tumor, enabling fragments to be removed for diagnosis by microscope. The slow growth after pieces have been removed, and the relief thus afforded, point to such a course as a most advisable one in treatment. The duration of the disease is often great, running a much longer one than *carcinoma*, sometimes of several years.

In this case, as will be shown, the disease occupies the fundus and body of the uterus, and does not invade the cervix. Hæmorrhage and pain were early and prominent symptoms. There was some smell to the discharge from the very first, but it was not until the later stages of the disease that the discharge became very offensive. The duration of the disease was also a long one. If we reckon from the time that she commenced to be again "regular," in June, 1867, the disease lasted six years. It was not, however, until the fall of 1871 that she began to flow severely, and to suffer severe pain. Reckoning from this date, the disease would have lasted two years, a longer time than is ordinarily the case with carcinoma.

The operation of removing portions of the tumor, we think, in this case, would have been productive of much benefit had it been resorted to, and we regret that the procedure did not suggest itself to our mind, although the disease would eventually have terminated fatally. The mass projecting into the uterine cavity was soft and friable, and the operation could have been easily performed. The source of so much suffering would thus have been, at least for a time, removed, and with return of the growth the operation could have been repeated.

The subcutaneous injections of morphia were of invaluable service, the use of opium or of its preparations by internal administration being very badly tolerated, occasioning many unpleasant symptoms, and being also much less effective. The patient looked eagerly and impatiently for the time to receive her injection, and seemed willing to put up with anything, provided only that she might be kept free from the pain, which, when not relieved by the medicine, was of a most severe and agonizing character.

The absence in this case of any evidence of disease of the stomach is interesting, in view of the numerous subjective symptoms pointing to that organ during life, probably all of reflex origin, unless the large use of morphine was in part a factor.

Since the report of the above case was taken down, there has appeared in the *Philadelphia Obstetrical Journal* of October and November, 1873, a very interesting article "On Sarcomatous Growths of the Uterus," by Dr. Wm. F. Jenks, of Philadelphia.

CASES OF DRAINAGE FROM THE CUL-DE-SAC OF DOUGLASS AFTER OVARIOTOMY.

By GILMAN KIMBALL, M.D., of Lowell.

(Continued from page 572.)

CASE V.—Miss T——, of West Newton, 52 years old, unmarried, of healthy, vigorous constitution, began to have an enlargement of the abdomen in 1866. It increased rapidly, and very soon her general health became seriously affected; so much so that for more than a year she found herself obliged to give up all bodily exercise and confine herself almost entirely to her room.

I was first called to see her in October, 1868. She was then very large, her disease evidently ovarian; had been tapped three times, but with only partial relief. Great emaciation, inability to lie down from difficulty of breathing, loss of appetite, œdema of lower limbs, and quickened pulse all showed the disease to be passing through its last stages. The chance of cure by surgical interference was not promising. Great opposition to an operation had been expressed by her attending physician, yet, with so much present suffering, and with only an early death to look forward to, she demanded this possible chance for her life. The disease was removed the 26th of October.

The tumor was of compound character, cystic and solid, and, as had been anticipated, extensively and firmly attached to the parietes, mostly to the right side. After evacuating several of the largest cysts, and enlarging the incision, which, at first, was merely explorative, an attempt was made to overcome the adhesions without resorting to the knife. In this attempt, a portion of the cyst walls gave way, leaving a patch of several superficial inches still attached to the parietes. From this, as well as from various other points, there was considerable bleeding, requiring the application of several ligatures. The pedicle was rather broad and thick, and too short to be easily brought outside. It was therefore tied in the usual manner, and the stump allowed to fall back into the pelvis.

In this, as in two cases before, I carried the ligature down through Douglass's fossa and out by the vagina. Instead, however, of simply passing them through a punctured opening they were lodged in a silver canula, which had been passed up through the vagina into the pelvis by means of a long, slightly curved trocar.

In closing the wound, it seemed particularly desirable to exclude, as far as possible, the surfaces damaged on account of adhesions; more especially that portion to which the patch of cyst wall above referred to still remained attached. In attempting this, I met with some diffi-

culty. The portion alluded to, so desirable to keep outside the peritoneal cavity, extended so deeply and so far down from the line of incision that it was found impossible to wholly exclude it by bringing it forward and placing it in apposition with a corresponding portion of the parietes of the opposite side. To overcome this difficulty, I was obliged to modify somewhat the plan I had usually pursued in similar cases. Finding the left lip of the incision comparatively unharmed as to its peritoneal surface, at the same time susceptible, with a moderate strain, of being stretched to a considerable extent, there was no great difficulty in carrying it fully across the front of the abdomen, and, with its free edge everted, attaching it by deep sutures to the opposite lip, quite below all that it was desirable to keep outside.

As for the right lip, thus effectually excluded, as a part of the abdominal parietes, it was disposed of by folding it inward upon itself, and carrying its free border down and adjusting it by a few stitches to the tegumentary edge of the opposite lip.

Without giving further details, it is only necessary to state that the result of this case was most satisfactory. From the day of operation till recovery was complete, convalescence was uninterrupted and rapid.

The advantage of the canula arrangement was shown by the large amount of bloody and offensive matter that flowed through it during the first week. The instrument was removed the tenth day; afterward, there continued a moderate discharge by the vagina for something more than a week. The ligatures were not detached till the end of the fourth week. Weight of tumor, fifty pounds.

(To be continued.)

OUR WEIGHTS.—Upon the average, boys at birth weigh a little more, and girls a little less, than six pounds and a half. For the first twelve years, the two sexes continue nearly equal in weight, but beyond that time males acquire a decided preponderance Thus, young men of twenty average about 143 lbs. each, while the young women of twenty average 120 lbs. Men reach their heaviest bulk at about thirty-five, when they average about 152 lbs.; but women slowly increase in weight until fifty, when their average is about 128 lbs. Taking men and women together, their weight at full growth averages about twenty times as heavy as they were on the first day of their existence. Men range from 108 to 220 lbs., and women from 88 to 207 lbs. The actual weight of human nature, taking the averages of ages and conditions—nobles, clergymen, tinkers, tailors, boys, girls and babies, all included—is very nearly 100 lbs. These figures are given in avoirdupois weight; but the advocates of the superiority of women might make a nice point by introducing the rule that women be weighed by troy weight—like other jewels—and men by avoirdupois. The figures will then stand: young men of twenty, 143 lbs. each; young women of twenty, about 146 lbs. each, and so on.—*London Medical Record*, April 29, 1874.

NEURALGIA TREATED BY NERVE-STRETCHING.—At the Clinical Society of London, Friday, April 10, 1874, Mr. Callender read the notes of two cases of neuralgia. In the first, the affection, which involved a stump, seemed to be due to neuritis connected with symptoms of spinal cord irritation. The patient had undergone several operations for the relief of his symptoms, such as amputation and the removal of portions of nerve; and, finally, the median nerve was forcibly stretched by pulling it down from the brachial plexus. No local trouble resulted from the operation; the patient was freed from the pain, and the symptoms of spinal irritation ceased.—*British Medical Journal.*

Progress in Medicine.

REPORT ON SURGERY.

By J. Collins Warren, M.D.

Cleft Palate.—At the second annual meeting of the German Surgical Society, Prof. Simon, of Heidelberg, read a paper on the establishment of perfectly clear speech by closure of fissure of the hard and soft palate. His experiences in this matter are thus formulated:—

1. Perfect speech is established in the rarest cases by the operation of staphylorraphy and uranoplasty. The real object of the operation is, therefore, only rarely attained. Out of sixty cases, forty of which occurred in his own practice, he observed in only a single case perfectly clear speech, which occurred in a girl aged sixteen. This patient had formerly used an obturator of Süersen, but did not speak so well with it as after the operation.

[Süersen's obturator consists of a hard-rubber plate accurately adapted to the roof of the mouth, with a tongue projecting from its posterior edge through the fissure, and reaching nearly to the posterior wall of the pharynx. This tongue widens into a triangular shape at its posterior extremity, assuming the form of a horizontal section of this part of the pharynx. By means of the superior constrictor of the pharynx, the slight interval separating the obturator from the walls of the pharynx is easily closed, thus preventing the passage of air through the nasal passages.]

2. In the majority of cases, the speech is improved by the operation, and this improvement takes place directly after the operation. Practice has no effect upon the purity of the speech, although it improves somewhat the power of articulation, and hence makes it a little more intelligible. In speaking rapidly, however, it becomes again unintelligible.

3. In a high degree of deformity of the palate, which frequently occurs, the most successful operation for uranoplasty or staphylorraphy will not improve the speech.

4. The performance of this operation while the patient is still very young, is of no advantage. Neither the later growth of the parts nor the practice in speaking begun in early life have any influence on the purity of the speech. In spite of years of practice, in deaf and dumb institutions, the patients still retain the same nasal tone which they had immediately after the operation.

5. The nasal tone remaining after closure of the fissure depends upon incomplete separation of the nasal from the buccal cavity, which, in the normal state, is effected by the contact of the soft palate with the posterior wall of the pharynx at a level with the hard palate. In the normal state, the soft palate is raised by the levator and tensor palati muscles to such a height that it touches the wall of the pharynx, which at the same time is arched forward by the superior pharyngi's constrictor muscle, to meet it at this point. In this way, a temporary and complete separation of the nasal from the buccal cavity takes place.

6. The imperfect separation of these two cavities after uranoplasty

and staphylorraphy is caused by the fact that the new palate is not absolutely, but relatively, too short. The soft palate can be lifted by a spatula, so as to touch the posterior wall of the pharynx, but in the act of speaking it is so held down by the pharyngo- and glosso-palatine muscles that it does not reach the bulging wall of the pharynx, and, consequently, the closure of the opening between the two cavities does not take place.

7. The momentary closure of the opening between these two cavities which is necessary for pure speech, so far as this is effected by the soft palate, can be accomplished by stitching the uvula to the posterior wall of the pharynx at a level with the hard palate, so as to leave small side openings (staphylo-pharyngorraphy), or by using a Süersen's obturator. In speaking, the superior constrictor will close the small openings on each side of the palate, which has thus been stitched up to the pharynx (forming an organic obturator); or, in the other case, cling to the Süersen obturator, and thus make the speech almost perfect.

8. The artificial union of the soft palate with the posterior wall of the pharynx is to be preferred to the use of a Süersen's obturator. In both cases, the speech is either nearly or quite pure, but there are certain disadvantages in the use of an obturator. The teeth to which it is attached are injured, the mucous membrane with which it is in contact is easily abraded, and it is difficult to keep the cavities of the mouth and nose clean and free from decomposing fragments of food. The organic obturator, on the other hand, has only a disadvantage from the fact that it is a little more difficult to keep the nose clean than when the parts are normal.

9. In accordance with this experience, the following rules for treatment should be adopted, in order to obtain the purest and most intelligible speech: Closure of fissure of the palate is indicated only at such an age at which the patient would evidently bear the operation well and carry out the orders of the physician during the after-treatment, that is, after the seventh or eighth year. In those cases in which the deformity is so great that speech evidently cannot be improved by an operation, the alternative can be suggested either to wear an obturator, or, after closure of the fissure, to have staphylo-pharyngorraphy performed. Where there is less deformity, the obturator should not be recommended, but the operation for closure of the fissure should be performed, because the speech possibly might thus be made perfectly pure, or at least as pure as with Süersen's obturator. If the speech, however, is still imperfect and unintelligible after the operation, the patient can then choose between staphylo-pharyngorraphy and division of the closed fissure, with use of Süersen's obturator. In those cases in which stitching of the palate to the posterior wall of the pharynx fails to perfect the speech, it is best to advise that the palate should be divided again, and an obturator fitted. In all cases in which the speech is either unintelligible or difficult to understand, long-continued practice in elocution should be advised; because, although the speech will not be purer, articulation will be improved, and, consequently, the speech will be more intelligible.

The *Medical News and Library* for April, 1874, contains an account of a new operation for cleft palate, described in the *Lancet* for February 28th last, by Sir William Fergusson:—

"The first steps of this operation are somewhat similar to the old operation for closing the cleft in the hard palate—namely, paring the edges of the cleft, and making an incision down to the bone parallel to, and about a quarter of an inch from, the edge of the cleft on either side, the point of the knife being carried back just as far as the junction between the hard and soft palate. Into these incisions a chisel half an inch broad is inserted, and its edge directed against the posterior margin of the hard palate and made to cut from behind forwards, thus partly detaching a slice of bone on each side, with the soft tissue and periosteum attached to their upper and lower surfaces. The result of this is that the sides of the cleft fall easily together, leaving a small aperture through the bone on either side. One, two, or, if the fissure be long, three stitches are passed through the lateral clefts by means of an ordinary aneurism-needle, and thus encircle the detached portions of bone and soft tissue, each suture passing through into the nasal cavity. It should be noted that there is no tension on the flaps, the threads merely keeping the parts steadily in contact. The amount of pain and constitutional disturbance is much less marked in the patients that have been treated in this way than when the old operation of dissecting up the soft parts from the bone has been resorted to.

"From the liability of the flaps to twist in slightly, and from the thinness of the edge, Sir William Fergusson is careful to pare the sides somewhat obliquely, in order to present wider raw surfaces for adhesion. The sutures, which are kept in much longer than in the ordinary operation, cause no harmful irritation. The lateral clefts become filled up by new bone, which is rapidly thrown out, and tends to keep the parts united firmly in the median line.

"The first case in which the operation was performed was that of a girl aged eighteen, whose soft palate had been closed two years ago, and whose hard palate had been operated on by the old method three times, but unsuccessfully, except that the gap was somewhat lessened in size. Before the operation by the above plan, on Nov. 22, 1873, the cleft was half an inch long and a quarter of an inch wide. Two sutures were introduced, and were removed in seven days. She was discharged at the end of the third week, with firm union of the whole palate in the median line, and the lateral clefts closed.

"The second case was also that of a girl of eighteen. The soft palate was closed three years ago. Since then, she has undergone two operations for the closure of the hard palate, with only partial success, by the old method. The cleft was oblong, three-quarters of an inch long, and three-eighths of an inch wide. At the operation, on Nov. 22d, two sutures were passed. The stitches were removed a fortnight afterwards, when there was a slight chink in the middle. The edges were therefore freshened, and a stitch re-inserted. This was kept in fourteen days, and she was then discharged with a small pin-hole anteriorly.

"The third case was that of a boy aged fifteen, previously successfully operated on for double hare-lip and cleft in the soft palate. One unsuccessful operation, followed by erysipelas, had been performed on the hard palate by the old method. Cleft one inch long and one-third of an inch wide. Operation, as above, on January 24, 1874. Three sutures were passed. Union has taken place, except at the posterior part, where there is a small hole, which is slowly contracting.

"The fourth case is that of a boy of fourteen, whose soft palate was closed in May, 1873. Last November, the hard palate was operated on by the old method, and the cleft somewhat lessened in size. Before operation, on the 7th inst., there was a narrow fissure about half an inch long. The bone in this case was rather difficult to cut. The patient has so far gone on well."

Extirpation of a Sound Kidney.—The *British Medical Journal*, Dec. 20, 1873, contains an abstract of a case reported in the *Wiener Medizinische Wochenschrift*, Nov. 29, 1873:—

"Dr. Brandt, Professor of Surgery in Klausenberg, has placed on record a case in which removal of the sound kidney took place in the human subject. A healthy man, aged 25, was stabbed with a bread-knife in the left hypochondrium. Hæmorrhage to the amount of three or four ounces followed; and, about three or four hours after the accident, a fleshy looking tumor was expelled through the wound by a fit of coughing, attended with severe pain. It was replaced by a bystander, but was soon again driven out by the cough. On his admission into hospital, twenty-four hours after the injury, Dr. Brandt, after a careful examination of the protrusion (of which a careful description is given), arrived at the conclusion that it was the left kidney. Its surface, with the ureter, was torn in some parts, and allowed the escape of a fluid, at first yellowish and transparent, but afterwards sometimes reddish and sometimes turbid yellow. It had an alkaline reaction, a specific gravity of 1042 to 1052, contained a large quantity of albumen and mucin, with some hæmoglobin, traces of urea, and an abundance of alkalies and alkaline earths. It gave a sediment, which, on microscopic examination, was found to consist of pus- and blood-corpuscles, masses of nuclei, mucus-fibrils and fibrinous clots; also epithelium of the kind belonging to the calyces and pelvis of the kidneys. Dr. Brandt arrived at the conclusion that the organ was rendered useless, that its retention endangered life, and that it would be best to remove it. The previous history of the patient did not contra-indicate this; he had had no severe illness, and, though the urine in the bladder contained some albumen, this might be derived from the injured organ. Accordingly, on the fourth day of the injury—a photograph of the patient having been first taken—Dr. Brandt tied the pedicle of the tumor in two parts, by means of a ligature passed through the middle, and cut it away with a knife. This operation was done on June 7th, and on the 23d the patient left the hospital convalescent. No symptoms of uræmia or of peritonitis occurred during the progress of the case. The amount of urine excreted was measured daily up to the 22d. The quantities were the following:—June 7th (half day), 310 *grammes*; 8th (whole day), 923 *grammes*; 9th, 905; 10th, 1425; 11th, 1211; 12th, 992; 13th, 1278; 14th, 1222; 15th, 1348; 16th, 1306; 17th, 1296; 18th, 1324; 19th, 1312; 20th, 1436; 21st, 1498; 22d, 1513 *grammes*. The urine was throughout acid, of specific gravity 1.010 to 1.040, and of normal composition: at first, it was of a reddish yellow color, but afterwards became clear yellow. Dr. Brandt has seen the man several times since the operation. He has no signs of disease of the heart, but complains of a sense of oppression and fatigue, especially in going up stairs, and says that he cannot work as well as before. Dr. Brandt, however, suspects that he may say this to avoid military service."

(To be concluded.)

Bibliographical Notices.

Mind and Body. By ALEXANDER BAIN, LL.D. New York: D. Appleton & Co. 1873. Pp. 200. 12mo.

THIS little volume of the International Scientific Series adds another to the list of books similarly designated which have been noticed in the JOURNAL the past year. This identity of titles in the latest works of Maudsley, Tuke, Brodie and Bain shows what question is uppermost in the world of psychology, and also that the body must take its place as an equal factor with the mind in a complete mental philosophy.

Bain attempts, in the above treatise, to popularize his subject to some extent. He treats the union of mind and body first as a matter of fact, and then shows the correspondence between the size of the brain and mental power; between its complexity of structure and the number of our mental acts; between the modes of action of mind and brain, as requiring proportionate time for transmission of ideas, and nervous currents; between the rise and fall of sensation and feeling, and the physical causes giving rise to them, as change of temperature, light, sound, music, spectacle; and between shock or diffused stimuli and acute or voluminous sensation. Among the laws of alliance are the law of relativity, of diffusion, of pleasure and pain, &c. A continuous impression is not felt. There must be change and contrast to produce consciousness to sensation, thought or feeling. Feeling arises when nervous currents are diffused in the brain, and do not go their rounds in a single line. Pleasure and pain are connected with high and low states of vitality respectively. Stimuli, conflicting with existing nerve currents, or when too intense and sudden, give rise to pain. Stimuli, acting in proper limits and directions, are pleasurable.

The will is related to the brain in three ways, since it depends on the spontaneous or surplus energy, on the directing sense of pleasure and pain, and on the organizing power of education. The intellect has really but three faculties—discrimination, agreement and retentiveness. We know all about an object when we have learned the differences and agreements of all its parts. Retentiveness, or memory, is the most remarkable of the three. The first law of relation seems evidently to be that the renewed feeling occupies the very same parts, and in the same manner as the original. The mechanism of retention is less evident; but we can say in general that "for every act of memory, every exercise of bodily aptitude, every habit, recollection, train of ideas, there is a specific grouping or coördination of sensations and movements, by virtue of specific growths in the cell junctions." By a curious computation, Bain estimates the number of possible mental acquisitions, which, he says, may be stated in tens, but not in hundreds, of thousands. The number of possible nervous connections is, he thinks, equally large, though they sometimes put a limit to our acquirements. Also, certain convolutions being deficient in size, we are wanting in capacity for certain classes of mental acquisitions, and have a bad memory for words, numbers, colors, sounds, &c.

But we cannot follow these interesting speculations further; neither is there space for comment, except to remind the reader that, to a great extent, they *are* speculations. We may, perhaps, conclude from them that mind does not act on body, or body on mind, as we are accustomed to say. Neither is the brain the instrument of the mind, nor mind a *secretion* of the brain. Mind and body, according to Bain, are simply two sides of one phenomenon. All mental facts are also physical, but it is hard to find fit terms to express this correspondence. We cannot, for instance, say whether the whole mind acts in each part of the brain or not, since we cannot think of mental acts in terms of *extension*, though we can in those of *succession*. We may be no nearer than ever to the solution of this enigma of mind and body, but it is worth something to have them properly stated. T. W. F.

Treatment of Nervous and Rheumatic Affections by Static Electricity. By Dr. A. ARTHIUS. Translated from the French by J. H. ETHERIDGE, M.D., Professor of General Therapeutics at Rush Medical College, Chicago. Pp. 144.

IT is difficult to believe that this little book was not written with intent to impose upon the credulous, its errors, both of omission and commission, are so numerous and glaring. It is not wanting in novel statements to be sure, but they are strikingly improbable in character. The first part of the book is given to a meaningless tirade against the use of galvanism, in the course of which we find, for example, the following:—

"Hence it is easy to understand all the disorders which can be produced in an organism as delicate as ours, all the corrosive currents, *saturated with violent acids*, which distroy everything, from flesh even to metals."

It seems strange that a Professor of Therapeutics should be willing to give his sanction to such a book, as he does by translating it, in which task, by the way, he has succeeded so poorly that the sense of many passages is hardly to be made out.

The following quotation (page 62) will give a fair idea of the character of the whole work:—

"We invite the attention of all our *confrères* to the two following axioms:

"1st. When a man is suffering, the electric fluid ceases to pass uniformly in his organism;

"2d. Electricity from the machine is always without effect, or is sensibly modified by the place or seat of any disease whatever. . . . . In a crowd of latent diseases, of equivocal seat, electricity accurately points out the organ affected, and the practitioner has only to demand of science the malady which affects the patient." J. J. P.

The Anatomical, Pathological and Surgical Uses of Chloral. By W. W. KEEN, M.D. (Re-printed from the *Philadelphia Medical Times.)* 1874. Pp. 19.

IN this excellent little essay, Dr. Keen details a number of experiments showing the value of chloral as a preservative and antiseptic. A stillborn fœtus was injected last December with solutions of various strengths, care being taken to limit each to a certain part. The four extremities were injected with solutions of five, ten, twenty and forty grains of chloral to the ounce of water respectively, while the trunk and head were injected through the umbilical cord with an eighty grain solution. The body was left for three months in a room of average temperature, at the end of which time it was found in an excellent state of preservation. The muscles were examined microscopically, and the fibres found perfectly unchanged.

It appears that chloral is an admirable preservative, not only for small specimens, but for entire subjects. The following experiment is certainly remarkable:—

"Experiment X.—A negro died in the city February 18th, and lay exposed during the warm weather we had then till February 28th, when he was brought to my rooms. The cuticle was off over all the chest, which was green and crepitant, and the legs were dropsical. A more unfavorable subject for preservation I have rarely had. Though a large man, I tried chloral, on February 28th, in the same strength and amount as in the last case, viz., gr. xv. to ℥i. March 12th, i. e., twelve days after injection and twenty-two after death, the subject is perfectly preserved. The cuticle elsewhere is adherent, the chest is natural in color, the smell is gone, and the specimen of muscular tissue which I exhibit, though taken from the abdominal walls, the most unfavorable part of the body, is of admirable color and consistence."

Dr. Keen compares chloral as an injection to zinc, arsenic, alcohol, salt and nitre, and thinks it superior to all; we are surprised that he makes no mention of carbolic acid, which is both cheap and efficient. By "pathological uses," Dr. Keen means the properties which chloral possesses of preserv-

ing cellular structures, such as come into the hands of the pathologist. Pus cells were preserved in a five-grain solution for six days, and at the end of that time exhibited the usual reactions on the addition of aniline or acetic acid. Bacteria were killed, even by a solution of the above strength. Dr. Keen suggests that this agent in solution may replace alcohol as a fluid for preserving cabinet specimens, which is "a consummation devoutly to be wished."

The experiments with chloral as a surgical application go to confirm the favorable reports of other observers. It appears to act as a complete deodorant within a very short time, and also as a stimulant, so that what was a foul, sluggish ulcer would become, in from two to three days, a healthy, granulating sore. It is irritant if used in too concentrated a solution. Ten grains to the ounce of water is quite strong enough, and in some cases even this needs dilution. The results of the cases reported were most marked in those with foul, unhealthy, ill-smelling, discharges, which were changed quickly to healthy looking sores, with laudable pus. The amount of discharge appeared to be diminished, but there was, seemingly, no increased rapidity of healing other than such as resulted from changing an unhealthy sore, which was stationary, or even enlarging, to a healthy one. The mucous membranes, as would be expected, were found to be more sensitive to the irritant properties of chloral than the skin.

Cases are reported of caries of the tibia, psoas abscess, and of foul ulcers, in which the offensive discharges were rendered comparatively odorless by the use of a ten-grain solution.

A case of cauliflower excrescence of the os uteri, with large hæmorrhage and great fœtor, had been treated with various disinfectants for thirteen months. A solution of chloral, five grains to the ounce, used as an injection, lessened the discharge, destroyed its odor, and relieved pain, so that the patient was able to walk about.

BOOKS AND PAMPHLETS RECEIVED.

Rupture of the Perinæum; its Causes and Cure. By A. K. Gardner, M.D. Published in *Medical Union*. 1874. Pp. 12.

Remarks on Double Monsters. By Edward S. Dunster, M.D. 1874. Pp. 13.

The Union University Catalogue. Albany. 1874. Pp. 141.

LOCAL ANÆSTHESIA BY SULPHIDE OF CARBON.—Dr. Ch. Bernard (*Gazette Méd. de l'Algérie*, No. 3, 1874) mentions the case of an Arab of the plain of Milidja, wounded in the plantar part of the left foot, near the heel, with glass, which penetrated. Six grammes of sulphide of carbon were poured drop by drop on the part, and made to evaporate quickly. In a minute's time the wound was enlarged, and the extraction of a piece of glass two centimetres long was made, without the Arab experiencing any pain.

Another Arab had a large carbuncle on the left of the abdomen. Dr. C. Bernard made use of ten grammes of sulphide of carbon by the spray apparatus, and then made six deep incisions, without any pain being felt.

Another medical man removed his wife's toe-nail, after Dr. Bernard had produced local anæsthesia, by dropping gradually six grammes of sulphide of carbon on the part. The operation lasted two minutes, but gave no pain.

This kind of anæsthesia is very simple and very rapid; it is preferable to ether, chloroform or refrigerants. There is no danger to be apprehended, and no disagreeableness when the sulphide is prepared pure. At first, a sensation of great cold is felt, which disappears, and in two or three minutes the part is insensible. In general, the patient has no other sensation than that of fear.

Richardson's apparatus is useful when a large tumor is to be rendered insensible; but it uses up too much of the fluid.—*British Medical Journal.*

Reports of Medical Societies.

The eighty-fourth meeting of the New Hampshire Medical Society was held at Concord, N. H., on Tuesday, June 9th, the President, Dr. J. L. Swett, of Newport, in the chair.

At 12 o'clock, M., the President, according to custom, gave an address. It was very able and interesting, occupied mostly with sanitary measures and local matters.

This was followed by the Annual Oration, by Dr. Dinsmore, of Francistown. Its subject was Quackery; but it referred chiefly to irregular and unbecoming practices on the part of those in the profession. It received great attention and frequent applause.

The Society then dined together at the Eagle Hotel, and, under the guidance of Dr. A. H. Crosby, of Concord, had a very pleasant time, with toasts and speeches appropriate to the occasion.

At the afternoon and evening sessions, a number of elaborate and interesting reports were made, among the more noticeable of which were that on Surgery, by Dr. C. P. Gage, of Concord, that on Climatology, by Dr. J. R. Ham, of Dover, that on Gynæcology, by Dr. J. F. Hall, of Portsmouth, and that on Necrology, by Dr. W. G. Carter, of Concord. In the last of these reports was a fitting eulogium of Dr. Dixi Crosby, the eminent lecturer, teacher and practitioner, of whom the whole State is so justly proud. Later, a series of resolutions of unusual elegance of diction and elevated sentiment were proposed, and, of course, unanimously adopted.

The Society met on Wednesday morning, at 8 o'clock; discussed several matters, and elected the following officers for the ensuing year:

President.—Nahum Wright, of Gilmanton.

Vice President.—S. M. Whipple, of New London.

Secretary.—Granville P. Conn, of Concord.

Treasurer.—Thomas Wheat, of Manchester.

The semi-annual meeting is to take place in September, at the Isles of Shoals.

The place and time of holding the next annual meeting was fixed at Concord for the third Tuesday of June, 1875.

The meeting was a pleasant, harmonious and profitable one to the members.

Photographing the Pulsations of the Heart.—The apparatus for this novel process, the discovery of Dr. Ozanam, of Paris, consists of a small, thin India-rubber bladder, connected with a short glass cylindrical tube. The bladder and a portion of the glass tube is filled with quicksilver, and the instrument is then applied to the chest of the individual to be examined, the bladder being placed opposite the heart's apex. By this contrivance, it will be apparent that each pulsation of the heart must be indicated by a corresponding rise and fall of the quicksilver in the tube, and, by the aid of a camera, it is a simple matter to indicate these changes of the column upon sensitive strips of paper. This ribbon of paper is unrolled, at a regular rate, from an axis worked by a simple mechanism, and thus is transmitted to paper an exact expression of rate of pulsation of the heart, as well as the regularity and force of its action.

Boston Medical and Surgical Journal.

Boston: Thursday, June 18, 1874.

We have been assailed in the May number of the *Nashville Journal of Medicine and Surgery* with a torrent of abuse such as, happily for the credit of the profession, is rarely seen in medical literature.

Our offence was to review* unfavorably the reprint of a former editorial in that Journal bearing the classical title of "Katy did and Katy didn't," and being "an inquiry concerning priority in the ligation of the internal carotid artery," by Dr. Wm. K. Bowling, the senior editor. The tone adopted by Dr. Bowling in his late attack is so coarse that we must decline to engage in any discussion, and we should not even allude to the matter did we not think it due to ourselves to reply to one of the charges made against us. We concluded our review by quoting a high-flown passage about "medical publications . . . . . from that which humbly trickles down the mountain side, mirroring the daisy, and offering drink to the bonnie lark, to that which rolls its interminable length along the lowland plain, refreshing cities and villages and hamlets, embosoming half the sky," &c. &c., and we alluded to it as "fragrant with the rhetoric of a southern clime." It cannot be denied that a great deal of this kind of writing is done at the South, but we laughed at it because it was silly, not because it was southern, and we should have done so as heartily had it come from any other quarter. The charge that we took the position that we did from any sectional or political jealousy is entirely without foundation, as anyone may see who will refer to our pages for several years back. We have written no unfriendly word of the South, and we have had no unfriendly thought.

With regard to the other points, we can only say that when Dr. Bowling shall see fit to reply to our review in the language used among gentlemen and in respectable literature, we shall be happy to give his reply due consideration.

It is satisfactory to learn from the report of the Massachusetts Charitable Eye and Ear Infirmary that this useful institution is relieved, by appropriation from the State and by legacies, from the straitened circumstances which its treasurer reported at the end of the previous year, and that the possible contraction of its operations then suggested may be avoided. The total number of patients the past year was 6,283, a slight increase over the number of the year before, though the number of patients treated in the house was somewhat less.

* Vide Boston Medical and Surgical Journal, April 30th ult.

The statistics of sixty-six cataract operations done by the surgeons, all but two by the method of von Graefe, are arranged by Dr. H. Derby. In fifty-nine of these, comprising the senile cataracts, the duration of treatment, amount of vision obtained (by Snellen's test), and other particulars, are given. It is to be hoped the time is not distant when the course of the Infirmary in this respect will be followed by other Institutions. Notes on some of the more interesting cases of aural disease are added by Dr. C. J. Blake.

THE following poem was read at the Annual Meeting of the Massachusetts Medical Society June 3, 1874, by Dr. Thomas N. Stone, of Wellfleet.

Brothers, amid the flowers of June,
We meet again;
One mile-stone more our foot has touched
On life's broad plain.

Our Alma Mater, matron dear,
Welcomes each son;
And shares, with all a mother's joy,
Each victory won.

Not *all* are here. Some duty keeps
By beds of pain;
Some ne'er, within our festal hall,
Will meet again.

No night-bell, harsh, disturbs them now
'Mid slumbers deep;
The Master, to His servants worn,
Has given sleep.

Now, as we meet on this bright day,
In festal hall,
This be our toast, with hearty hip,
We're brothers, all.

One day within each circling year
We'll greet with joy;
And, though our locks are scant and gray,
We'll play the boy.

* * * * * * * * *

"Again we rest, as well we need,"
I said, last week, to my old steed.
I always talk in a brotherly way
To that same steed, so staid and gray;
For, though small faith in Darwin's creed,
So much of good lies in that steed,
It may outlive the stroke of death,
And show some soul beyond mere breath.

My good gray heard with ears attent,
As if she knew what each word meant;
She smiled in a sad and anxious way
As to the cars I turned away,
As if she would in warning say,
"Good master of thyself take heed,
No love like mine has iron steed."

I tread your streets in country style,
O'er paths of brick, 'neath granite pile,
To stores where health is sold;
To learn if, perchance, some chemistry rare
Had added strength to God's own air
Our fathers breathed of old.

As I go prowling round, no doubt
Clerks think that Rusticus is out,
Or some poor country cuss,
Whose head no beaver ever pressed,
Whose hand no kid glove e'er caressed,
Who never rode in a buss.

As 'fore some label long I stop,
I scratch my pate till hay seeds drop
From out my tangled hair.
Here lacto-peptine, thund'ring word,
Does every power of Nature hoard;
No mortal need despair.

Pancreatine our lacteals play
So gently on our festal day,
No colic need we fear.
No longer now, for costive ills,
We need resort to nauseous pills—
The *prima via's* clear.

This nervous force of Brown-Séquard
We need no longer now regard;
'Tis furnished by strychnine.
If lungs and liver both are gone,
We'll make the patient still live on
By cod oil *et* pepsin.

This fruit is from the tree of life
Old Adam lost through foolish strife,
And Eve forgot to steal.
Where's Holmes, who says there is no cure
But poppy-leaves and quinine pure,
Our mortal ills to heal?

If death should travel now our vale
To seize consumption's victims pale,
We've got a dose divine.
I tried it on my skeleton,
And soon upon each naked bone
Muscles began to shine.

Its cod oil greased each stiffened joint,
And rounded well each angle's point,
While phosphorus made his brain.
Beef gave the food he'd wanted long,
Its wine and iron made him strong—
The rascal broke his chain!

He took my cloak from off the wall,
My beaver from the outer hall,
And then he took his way.
While I, confounded by his brass,
Just stepped aside to let him pass,
Nor dared I say him nay.

A wand'ring Jew he walks the earth,
For where's the spot that gave him birth,

His new brain can't divine.
If such an one, in daily round,
By any country brother's found,
Please take that hat of mine.

THE *British Medical Journal*, May 9, 1874, contains an editorial on the Action of Modern Bullets on the Animal Body, to which we are indebted for the following facts:—

During the recent Franco-German war, when the combatants fought at short distances, the frequency and severity of the injuries of bones, and the size of the apertures of exit, led to the supposition that explosive bullets were used by the French. The researches of Drs. Busch and Küster have shown that the supposition was unfounded, and that the injuries resulted from the use of bullets made of soft lead.

In making the experiments which led to the conclusion just mentioned, a large target was placed behind animals, both living and dead, so as to enable the condition of the bullets to be observed after their passage through the body. The arms used were a sporting rifle, the needle-gun, Chassepot, Manser and Henry-Martini rifle. The general results of the investigation were as follows:—

There is no essential difference in the action of bullets on the living and on the dead body; so that the statement which is made in text-books is erroneous—that gun-shot wounds are more extensive in the living body than in the dead, and that this affords a means of determining whether the injury has been inflicted during life or after death.

The extent of the destruction is in inverse ratio to the distance, and in direct relation with the initial velocity of the bullet.

The destruction of the tissues is produced by the lead becoming heated by collision against a solid substance, and consequently broken up, but without being melted. The bullet is mechanically divided, leaving the finest particles of lead in the recesses of the wound, while fragments of various sizes pass out along with pieces of shattered bone. Dr. Busch has shown that lead loses its cohesion in proportion as it is heated. If two bullets, one cold and the other heated, be allowed to fall on a stone from a height of six feet, no impression will be made on the first, while the second will be distinctly flattened. The heating of the ball takes place in accordance with the law, that whenever it meets with resistance a part of the force is changed into heat. The manner in which the injury is produced in the animal body is easily explained. The bullet shatters the first bony lamellæ with which it comes in contact, becomes heated, and is consequently broken into several fragments against the projecting portions and angles of the bone. The wounds made from short distances by the Chassepot and Manser, which have the greatest initial velocity, were frightful.

It was found that such injuries as have been described were produced only by bullets made of soft lead. Bullets made of hard lead are used with only one of the modern weapons—the English Henry-Martini rifle. The hardness is produced by amalgamation of the lead with tin in the proportion of 12 to 1. The initial velocity of this rifle is nearly as great as that of the Manser, and yet the wound produced by it is very much smaller. The apertures of entrance and exit are rounded, and if the edge of a rib is hit, the loss of bone forms the segment of a circle corresponding to the circumference of the ball.

From the statements here made, it is evident that the opinions previously entertained as to the action of shot have been shaken by the introduction of modern weapons, and require reform. In future, in judging of the severity of an injury, it will be important to ascertain at what distance, and from what weapon the shot was discharged, and whether it was of hard or of soft lead. The penetration of the bones of an extremity by a Chassepot or Manser bullet at short distances will, in nearly all cases, demand amputation.

Dr. Küster refers to the bearings of the question on the interests of hu-

manity. The use of explosive bullets of small calibre is forbidden by international agreement; but if it be shown that bullets of soft lead, at least at short distances, act just like explosive bullets, and that a close combat with such bullets can be nothing but a horrible butchery, the members of the Geneva Convention must use every effort to obtain an international verdict against soft lead bullets.

The Hospitals.*

BOSTON CITY HOSPITAL.

(Friday, June 12.)

Crushed finger, kicked by a horse. Hydrocele. Necrosis of metatarsus and third toe. Fatty tumor. Cyst beneath the sterno-mastoid. Iridectomy.

During the week, by Dr. Williams, secondary operation for cataract. The child, 4 years of age, had had soft cataract removed from both eyes. Since then, the capsules had become thickened and obstructed vision; these were removed by fine forceps introduced through the anterior chamber.

Divergent, following an operation for convergent, strabismus. The little girl's eye had been operated upon, some years ago, by another physician. The internal rectus had failed to unite, and the eye is turned considerably out. An incision being made in the conjunctiva near the inner side of the cornea, the internal rectus was found after some trouble, dissected up and fastened near the cornea by sutures, thus drawing the eye inwards. Then the external rectus was thoroughly divided, and the edges of the conjuctiva brought together by sutures.

W. P. BOLLES.

Correspondence.

ELECTROLYSIS OF UTERINE TUMORS.

MESSRS. EDITORS,—In your issue of Jan. 29th of this year, I find an article from the pen of Dr. Kimball, of Lowell, entitled "Cases of Uterine Fibroids treated by Electrolysis," which contains several statements relative to the agent employed, involving inaccuracy, and calculated, in my opinion, to do more harm than good. As regards the Doctor's history, diagnosis and pathology of uterine fibroids, there is nothing to say, except that they are marked by his usual sagacious research and extended experience. When, however, he speaks of treating them by electrolysis, at the same time employing a galvano-cautery battery of no small power, and, in place of removing his tumors by the slow process of chemical decomposition and absorption, acts directly upon the morbid mass by means of the *intense heat* evolved from "thirteen and a half square feet of surface," there is such an evident misapprehension of terms that, as a professed electro-therapeutist, I must "rise to explain." The difference between electrolysis and galvano-cautery lies mainly in the words above written, viz.: in the one case, *slow* resolution of a substance, by means of an *intensity* galvanic current passed through it, into its component gases, acids and bases; the former usually passing off and the latter remaining to be carried into the circulation by the absorbents, thus removing the mass without any systemic shock or subsequent constitutional disturbance; in the other, *rapid* destruction of tissue by means of *intense heat*, either applied directly to the surface by means of the various instruments devised for the purpose, or, as the Doctor has used it, internally by electrodes made to pierce nearly to the centre of the mass to be removed. In the one case, there is little general pain, no local suffering and no subsequent prostration; in the other, all these unfavorable symptoms to a marked degree. That the Doctor's results were good, I am glad to note; that they might have been equally

* The report of operations at the Massachusetts General Hospital is unavoidably postponed. It will appear in the next number.

valuable with much smaller cost of suffering to his patients, my own experience in the same line bears me out in asserting.

The form of battery almost exclusively used in both continents for electrolytic operations, is one wherein the number of elements is large, and their separate size small; such as the 32-cell instrument of the Galvano-Faradic Company. In this apparatus, the whole *quantity* of electricity generated comes from the first two pairs; the remainder, or so many of them as may be in battery, only acting as intensifiers, or drivers of the current so obtained. It will be seen that the *intensity* of this current may be altered at will, an indispensable qualification in these operations where more power than is absolutely needed for chemical decomposition should not be employed, and where an expert operator will rarely produce pain and *never* subsequent prostration.

Again, actual experience teaches that prolonged external use of an electrolytic current may be productive of the same results as a shorter term of treatment subcutaneously.

That the galvanic flow does actually traverse bones as well as soft tissues, is not longer necessary to demonstrate; and, conceding this, would it not seem better to avoid such "profound impression" as the Doctor made upon his first case, by essaying, at least, the milder plan of external application?

But it is not with the Doctor's mode of applying the current that I join issue, but with his misapplication of terms.

It seems as if, in place of electrolysis, he has made use of galvano-cautery, which his powerful battery was certainly competent to supply.

Thirteen and a half square feet of zinc-carbon surface, immersed in a cell containing the usual bichromate solution, would furnish a *quantity* current sufficient to destroy all organic tissue between its poles, they being, as the Doctor states, not more than an inch or so apart.

It is in no captious spirit, Messrs. Editors, that I venture upon criticism of Dr. Kimball's operations; it is simply that the profession at large may not be misled by an incorrect use of terms, and believe that an electrolytic operation is as formidable as an ovariotomy, when its successful performance may really be attained without fear or trembling on the part of either surgeon or patient. Further, while the specialty of electro-therapeutics is yet so young, it seems the more important to attain, in its technical phraseology, as much correctness as time and opportunity will permit, and it is to this end alone that I write.

The more attention that general practitioners can be induced to give to a form of treatment which is at present engrossing the attention of many leading minds in the profession, the less likely will they be to use the idiotic expression of a medical man of my own city, who recently declared electricity to be a great humbug.

In conclusion, permit me to cite a case which occurred in my own practice, where a result quite equal to Dr. Kimball's was obtained by external electrolyzation alone. In November of 1873, Mrs. B. presented herself at my office for examination and treatment. Patient was a strong woman, had passed the grand climacteric, and had been operated upon a year previously for mammary scirrhus of the left side. Cancerous nodules had developed themselves along the scar of the operation, and the breast was the seat of a second scirrhus the size of a hen's egg. Smaller hard tumors existed in both axillæ, and all lymphatic glands were enlarged and hardened. Countenance cheerful, and patient feeling generally well. I determined to try external electrolysis, and received the assent of the lady, with the proviso that in case of failure I would use the needles. The 32-cell battery, above alluded to, was used in this and all my other operations of this class. A large sponge-covered carbon point was placed under the gland and a smaller one pressed directly down upon the mass from above, both saturated with salt water, and a current employed of six cells, gradually increasing by resistances to ten, when pain was felt, and therefore the number was reduced to eight, when the lady said the sensation was one of pleasant warmth. The *séance* was continued fifteen minutes, with frequent voltaic alternatives or reversals of current.

These sittings were repeated every day for three months, when, to my delight, the tumor was reduced to the size of a boy's marble, and the nodules along the track of the old scar were gone.

To this time—four months since the date of the last application—the tumor shows no signs of increase, and the case is considered cured—so far as said tumor is concerned. It is true that a scirrhus bears little relation to an uterine fibroid; but, as it is usually considered as difficult to remove, and infinitely more liable to recur, it would seem that the cases are somewhat parallel, so far, at least, as the electrolytic effect goes.

Very respectfully, WM. F. HUTCHINSON, M.D.

175 *Broad St., Providence, R. I., June* 9, 1874.

NURSING AS AN ART.

MESSRS. EDITORS,—The longer we live and practise the less faith we have in *mere medicine*, and the more curious do the old rules appear which point to medication and say nothing of diet, manner of living, pure air or *nursing*. Hygiene and medicine have been growing more and more into accord from year to year, and now, more than ever, the science of nursing has made to itself a place. There is nothing that comes home to a doctor like it.

There are incidents of practice that burn themselves into our souls. A patient was seriously ill with fever; no good nurse was to be had. The family were much worn out, and a young man, a friend, was engaged to sit up at night. He had definite instructions; there was not very much to be done, but the patient was to be kept warm, and to be wakened from his drowsy stupor at certain times, to take nourishment. His life depended upon his being sustained.

With the best will in the world, toward morning the poor fellow fell asleep. He was not accustomed to watching, he had done his day's work, and was weary and exhausted. He woke with a start in the dull cold of the morning, to find his charge cold and insensible, and, though not dying, he had lost so much ground that he never could be revived. The patient died, and the doctor and the watcher never forgot it. A good nurse might have saved a valuable life.

As a rule, women make the best nurses, or, rather, more of them have a natural aptitude for the work. A few men must stand superior for skill and strength, but the main supply of nurses must be from the ranks of women. Once it was left to nature, taste, necessity or, let us say, chance; now, with proper education, nursing will be an honored profession.

We have begun with training schools; all good work moves slowly. They will increase, and we shall have more and more *aids* in the field, in the shape of intelligent, skilled nurses. Then will the physician no longer leave a patient with doubt as to the result of the next visit.

The best training is teaching and experience; as the best taught surgeon is no real surgeon without experience, so with the nurse. Yet much may be learned.

Florence Nightingale wrote a little book, "Notes upon Nursing." It has done a good work. A friend of Miss Nightingale, Miss Florence Lees, who has recently visited this country, has written a "Handbook," having reference principally to hospital nursing, but full of instruction to any one who has the care of the sick. The book contains the most minute instructions with regard to the care of the sick, of their rooms and beds, with all the preparations and arrangements for operations, with ideas as to cleanliness, diet and ventilation, that vexed question which puzzles the wisest. As a substitute for training, this manual is invaluable, and even to the educated it would be useful for reference. Eight years of experience in hospitals and schools, in the camp before Metz, and in Germany during the war, has given the writer rare opportunities for practical knowledge.

Pending the time when the nurse shall be the educated ally of the physician, these handbooks are invaluable. A. B.

Medical Miscellany.

DR. BROWN-SEQUARD has sailed for Europe.

DEATH OF A CENTENARIAN.—A woman died in Berlin, on the 8th of April, at the advanced age of 103 years and 9 months.

FOOT AND MOUTH DISEASE has broken out in Lincolnshire and one or two other counties in England.

THE resolutions on the late Dr. Dixi Crosby, read before and adopted by the New Hampshire Medical Society, were prepared by Albert Smith, M.D., LL.D., of Peterborough, N. H.

PROF. EUGEN SCHNEIDER died at Munich on the 9th of April. He was born in 1796, and occupied the chair of Anatomy in the University of that city from the year 1826 to 1854.

LONDON.—According to the report of the Bureau of Statistics for 1873, the population of London at the close of that year amounted to 3,356,073 persons. The total number of births during the year was 121,200; the number of deaths 76,634.

THE attention of those of our readers who are members of the Massachusetts Medical Society is directed to the advertisement in relation to the proposed Medical Register of Massachusetts. The Register is well advanced towards completion, and it is very essential that the compiler's circulars should have prompt response so that the work may do full credit to the profession of the State, as well as to the enterprising author of the project.

STOCKHOLM.—Smallpox and typhoid fever have prevailed extensively in this city. During the week ending April 10th, 185 new cases of smallpox were reported, with 25 deaths, and in the previous week 138 new cases with 37 deaths. Total number of cases since November, 3,000; total number of deaths during that period, 618.

RABIES MEPHITICA.—A writer in the *American Journal of Science and Arts* asserts that the bite of the *Mephitis Mephitica*, or common skunk, is very frequently followed by symptoms very similar to *rabies canina*, ending in convulsions and death. The period of incubation lasts from a few days to two years. Ten cases of death from the bite of this animal are appended, all occurring in the State of Kansas.

INTERNATIONAL MEDICAL CONGRESS.—The organization of an International Medical Congress at Brussels, in 1875, is being carried out with great activity. The president is to be Dr. Vleminckx, President of the Academy of Medicine, who has already presided over other scientific congresses with tact and authority. The Belgian government has promised its coöperation, but it belongs specially to the members of the medical profession to set their shoulders to the wheel, in order to make the scheme work.—*London Medical Record.*

JAPAN.—The details of the destruction, by fire, of the French military Hospital at Yokohama (L'Hôpital Jourès) have been received. The conflagration occurred upon the 2d of April, and was, fortunately, unattended by any loss of life, the patients having been all hastily removed, first to the neighboring houses, and, later, to the General Hospital.

NEW APPARATUS FOR APPLYING EXTENSION TO THE ARM.—Dr. K. Gussenbauer has devised a simple and ingenious apparatus, by the aid of which the principle of the weight and pulley is introduced to apply extension in cases of fracture of the upper extremity of the humerus. The apparatus has been employed with success for two years in the *clinique* of Prof. Billroth, the patients being allowed to go about as usual during the course of the treatment.

PRESERVATION OF MEAT.—M. Poggiale described to the Academy of Medicine, at a recent meeting, the process followed by M. Tellier, in his establishment at Auteuil, near Paris, for the preservation of meat. The vessels or chambers in which the meat is enclosed are kept cool by the alternate vaporization and condensation of methylic ether. Specimens of meat and game that had been kept in this way for weeks were examined, and found to be in good preservation. The game, however, had lost somewhat of its flavor.—*Medical and Surgical Reporter.*

A DISLOCATED LIVER MISTAKEN FOR AN OVARIAN TUMOR.—The patient, an unmarried woman, aged twenty-four years, was the subject of a large and painful abdominal tumor, of eight months' growth, for the relief of which the operation of ovariotomy was decided upon. Upon opening the abdominal cavity, the ovary was found to be healthy, the swelling being due to an enlarged liver. This organ was free and movable, pressing upon and displacing the uterus, bladder, rectum, and other abdominal organs.—*The Richmond and Louisville Medical Journal.*

SINGULAR DEATH FROM BLOOD-POISONING.—Dr. Weigel, a surgeon connected with the military hospital at Münster, was recently made dangerously ill, the result of inoculation with morbid matter absorbed at an autopsy through a slight wound in his hand. In performing an operation for his relief, another surgeon, Dr. Kruse, chanced to make a slight incision in his finger, by which means he himself became inoculated, and, after severe suffering, died.

ANTE-MORTEM CREMATION.—A young lady had been ill some time, and her sapient advisers decided she had Bright's disease, for which they prescribed a *turpentine vapor bath.* The bath was administered under the supervision of two irregular practitioners in the following manner:—The patient having had the clothing removed, and been enveloped in blankets, was placed upon a chair with a hole in the seat. Beneath her was suspended a tin vessel containing the turpentine, and under it was placed a spirit lamp. The chair was covered with blankets and the lamp lighted. In a few minutes, the patient sprang from the chair, exclaiming that she was on fire; simultaneously an explosion occurred, disseminating the ignited fluid about the chamber. The young lady was terribly burned in the regions of the nates and thighs. She suffered excruciating agony during the three succeeding days, when death relieved her. The authors of her sufferings stated that they regretted exceedingly the unfortunate accident; that it was an experiment they had never before tried, but from which they had hoped good results; that the small quantity of vapor, with which she had come in contact, had *already greatly benefited her kidneys;* and that the accident did not materially affect the result, since her case was hopeless.—*Medical and Surgical Reporter.*

MORTALITY IN MASSACHUSETTS.—*Deaths in fifteen Cities and Towns for the week ending June 6,* 1874.

Boston, 117; Worcester, 11; Lowell, 18; Milford, 2; Cambridge, 30; Salem, 10; Lawrence, 13; Springfield, 5; Lynn, 9; Fitchburg, 1; Newburyport, 1; Somerville, 9; Fall River, 14; Haverhill, 6; Holyoke, 9. Total, 255.

Prevalent Diseases.—Consumption, 40; pneumonia, 16; scarlet fever, 10; whooping cough, 10; typhoid fever, 8.

GEORGE DERBY, M.D.,
Secretary of the State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, June 13th, 108. Males, 58; females, 50. Accident, 2; abscess, 1; apoplexy, 2; anæmia, 1; aphthæ, 2; disease of the bowels, 1; bronchitis, 4; inflammation of the brain, 3; congestion of the brain, 1; disease of the brain, 2; cancer, 1; cerebro-spinal meningitis, 1; cholera infantum, 1; cholera morbus, 2; consumption, 24; convulsions, 2; debility, 1; diarrhœa, 2; dropsy of the brain, 1; drowned, 1; scarlet fever, 2; typhoid fever, 2; gastritis, 1; disease of the heart, 9; malformation of the heart, 1; jaundice, 1; disease of the kidneys, 3; disease of the liver, 1; congestion of the lungs, 2; inflammation of the lungs, 14; marasmus, 6; measles, 1; old age, 2; paralysis, 1; pleurisy, 1; premature birth, 2; puerperal disease, 3; disease of the spine, 1.

Under 5 years of age, 34; between 5 and 20 years, 7; between 20 and 40 years, 34; between 40 and 60 years, 19; over 60 years, 14. Born in the United States, 58; Ireland, 35; other places, 15.